

REMARKS

These remarks are in response to the Office Action dated June 23, 2011. Applicants request a one-month extension of time and authorization is given to charge Deposit Account No. 50-0951 for the appropriate fees. At the time of the Office Action, claims 1-15 were pending, with claims 6, 8, and 10-15 being withdrawn from consideration based on a restriction election. In the Office Action, claim 9 was rejected under 35 U.S.C. §112. Claims 1-5, 7 and 9 were rejected under 35 U.S.C. §102. The rejections are discussed in more detail below.

I. Rejection under 35 U.S.C. §112

Claim 9 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action states that there is insufficient antecedent basis for the limitation "the construction element" in claim 9. This rejection is not understood, as claim 9 is dependent upon claim 8, which includes antecedent basis for this feature. As rejoinder of claim 8 is requested upon allowance of claim 1, withdrawal of the rejection is respectfully requested.

II. Rejections under 35 U.S.C. §102

Claims 1-4, 7 and 9 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Publication No. 2003/0045778 to Ohline et al. ("Ohline"). Claims 1 and 5 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Publication No. 2008/0086854 to Boyd et al. ("Boyd"). Applicants respectfully submits that the claims are patentable over these references.

The application teaches cables of the ring of cables being fixedly secured in the radial and tangential direction. The cables comprising the ring of cables are in direct contact with neighboring cables, preferably, although not essentially, over their whole length. This enables the cables of the ring of cables to absorb a pulling force, as well as a pushing force, allowing the ring of cables to be used for the mechanical coupling of the head to a handgrip. This arrangement enables the instrument provide accurate control of the head by the proximal end of the instrument, the

cables of the ring of cables are fixedly secured in the radial and tangential direction.

The feature that the cables of the ring of cables are fixedly secured in the radial direction is not taught or suggested by the disclosure of Ohline. In figure 6D of Ohline, tendon sleeves are shown that abut each other, in which each sleeve holds a single tendon cable 560 (see paragraph 75). It is further mentioned that in case, for example, three tendons articulate a segment, all three tendons could be contained in a single tendon housing. Such a combined tendon housing could further utilize lubrication to accommodate independent movement by individual tendon cables and/or it could be divided into compartments that isolate the tendons within the housing.

In Ohline, it is therefore clear that in the case where single tendon cables are contained in a tendon sleeve housing, the cables in neighboring tendon sleeve housings are neither fixedly secured in the radial and tangential direction, nor is each cable of the ring of cables disposed such that at least a part of both sides is in direct contact with another cable of the ring of cables. Conversely, if according to Ohline, several tendon cables are contained in a tendon sleeve housing, it is taught that lubrication can be used to accommodate independent movement by individual tendon cables and/or compartments can be provided that isolate the tendons within the housing.

Thus, both the use of lubrication and the use of compartments teach away from the feature of claim 1 that each cable of the ring of cables is disposed such that at least a part of both sides is in direct contact with another cable of the ring of cables. To the contrary, Ohline strives for isolation of the cables. In all its disclosed embodiments, Ohline therefore fails to show the combination of all features of claim 1.

Turning now to Boyd, the evaluation of the Boyd citation in the Office Action is also clearly erroneous. Boyd has nothing to do with the instrument claimed in the present application. Claim 1 concerns an instrument for high-precision or surgical applications of a minimally invasive nature. Boyd relates generally to the art of fasteners and methods of fastening (see its paragraph 2). In paragraph 5, Boyd mentions the need for fasteners, snares, cutting and gripping devices that may be deployed in a confined environment in a flexible manner that can be used with confidence. Boyd fails to teach anything about a distally positioned directable head. If part 16 of Boyd can be considered a head, it still is not directable.

Furthermore, Boyd does not have a proximal end equipped for operating a head. In the Office Action, it is alleged that 38 relates to such a proximal end, but this is erroneous. As is explained in paragraph 102, part 38 is an insertion device to introduce the tensioning members 12 into the hose 14.

Moreover, Boyd is devoid of a ring of cables comprising longitudinally extending cables connecting to the head. As figure 3 shows, the tensioning members 12 do not connect to the head 16. Neither are the cables fixedly secured in the radial direction. The cables clearly have room to move within the hose 14, and are in the form of a bundle as opposed to a ring. Boyd therefore does not anticipate the claims, nor render the claims obvious.


The independent claims are thus believed to be patentable over the cited prior art for at least the foregoing reasons. The dependent claims are also believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

III. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

Date: 10-20-11


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